

**IN THE ABSTRACT:**

Please DELETE the Abstract in its entirety and substitute the following new Abstract.

A method of evaluating a scattered light signal generated by a scattered light receiver when detecting especially fine particles in a carrier medium, wherein the scattered light signal runs through a filter algorithm operation to evaluate the scattered light signal subject to specific filter algorithms, the filter algorithm operation being based on a slope of the scattered light signal. The invention relates to a method for evaluating a scattered light signal which is produced by a scattered light receiver upon detecting especially fine particles in a carrier medium. The scattered light signal thereby cycles through a calibration step, a drift compensation step, a temperature compensation step, a sensitivity adjusting step or a filter algorithm step selectively or in random order succession. The invention moreover relates to a scattered light detector for carrying out the above cited method having a housing, an inlet opening and an outlet opening in said housing, between which the carrier medium flows through the housing on a flow path, having a light source which directs light to a scattered light center lying on the flow path, having a scattered light receiver for a portion of the light scattered on particles in the scattered light center, and having a scattered light signal amplifier for amplifying the scattered light signal, wherein the scattered light signal amplifier is configured as an integration amplifier.